Amendments to the Specification

Please amend the title as follows:

~~POST-PASSIVATION METAL SCHEME ON AN IC CHIP WITH COPPER INTERCONNECTION~~ WIREBOND PAD FOR SEMICONDUCTOR CHIP OR WAFER

Please amend the last full paragraph on page 2 as follows:

Copper interconnection requires an aluminum cap at the passivation openings to protect the copper from environmental deterioration such as oxidation from the ambient and to provide a metal pad for wire bonding. Today many integrated circuit chips use copper as the interconnection metal. From a performance perspective, copper interconnection offers a higher propagation speed than does an aluminum interconnection, making copper a desirable technological solution for current IC design. However, copper interconnection also incurs reliability concerns. When a copper I/O pad is exposed to atmosphere, its surface is subjected to chemical attack by the oxygen and moisture in the atmosphere. To overcome this problem, prior art has disclosed a method and structure to prevent copper chemical attack. By depositing a metal (such as aluminum (Al)) cap layer on the surface of the copper I/O pad, the copper I/O pad can remain intact in the passivation opening in the ambient. This metal cap layer is especially important where processing through the passivation layer is performed in one fab and then post-passivation processing is performed in another fab. Moreover, an Al (or other metal) pad is able to form a stable bonding structure with Au wire.

Copper alone cannot form a bondable structure with Au wire. Therefore, the Al cap layer provides the wire-bonding capability for the copper I/O pad. Fig. 1 shows an aluminum cap 32 ~~22~~ on a copper line 24. The Al cap allows the formation of a wire bond 40 attaching to it firmly. For example, U.S. Patents 6,451,681 to Greer and 6,376,353 to Zhou teach using an Al cap over a copper bond pad for wire bonding. U.S. Patent 6,544,880 to Akram discloses gold over a copper pad and optionally additional metals to prevent formation of intermetallic compounds in wire bonding.